GenCore version 4.5
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OM protein - protein search, using sw model

Run on: July 17, 2002, 11:11:20 ; Search time 7 [illegible] Seconds
(without alignments)
25.224 Million cell updates/sec

Title: US-09-610-134-2
Perfect score: [illegible]
Sequence: 1 [illegible]VAQYKAIPVVLENA 16

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 747[illegible]4 seqs, 1110[illegible]736 residues

Total number of hits satisfying chosen parameters: 20[illegible]

Minimum DB seq length: 0
Maximum DB seq length: 16

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_032802:*
[illegible]

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	77	100.0	16	18	AAW40937	Cryptic peptide 4
2	77	100.0	16	20	AAY25525	Human MHC Class II
3	68	88.3	14	18	AAW40979	Cryptic peptide of
4	[illegible]	87.0	14	18	AAW40978	Cryptic peptide of
5	[illegible]	[illegible]	14	18	AAW40980	Cryptic peptide of
6	[illegible]	81.8	14	18	AAW40981	Cryptic peptide of
7	[illegible]	80.[illegible]	14	18	AAW40977	Cryptic peptide of
8	[illegible]	[illegible]	14	18	AAW40982	Cryptic peptide of
9	[illegible]	[illegible]	14	18	AAW40976	Cryptic peptide of
10	54	[illegible]	14	18	AAW40975	Cryptic peptide of
11	54	[illegible]	14	18	AAW40983	Cryptic peptide of
12	54	[illegible]	[illegible]	18	AAW4[illegible]	[illegible]
13	[illegible]	[illegible]	14	18	AAW4[illegible]4	[illegible]
14	4[illegible]	[illegible]	14	18	AAW4[illegible]4	[illegible]
15	4[illegible]	[illegible]	14	18	AAW4[illegible]	[illegible]
16	4[illegible]	[illegible]	[illegible]	18	AAW4[illegible]	[illegible]
17	42	[illegible]	14	18	AAW4[illegible]	[illegible]
18	[illegible]	[illegible]	14	18	AAW4[illegible]	[illegible]
19	[illegible]	4[illegible]	14	18	AAW4[illegible]	[illegible]
20	[illegible]	4[illegible]	14	18	AAW4[illegible]	[illegible]
21	[illegible]	44.[illegible]	14	18	AAW4[illegible]	[illegible]
22	[illegible]	44.[illegible]	[illegible]	18	AAW4[illegible]	[illegible]
23	[illegible]	4[illegible]	[illegible]	[illegible]	AAY[illegible]	[illegible]
24	[illegible]	[illegible]	14	18	AAW4[illegible]	[illegible]
25	[illegible]	[illegible]	14	[illegible]	AAM[illegible]	[illegible]
26	[illegible]	[illegible]	[illegible]	21	AAB[illegible]	[illegible]
27	[illegible]	[illegible]	[illegible]	[illegible]	AAY[illegible]	[illegible]
28	[illegible]	[illegible]	[illegible]	[illegible]	AAY[illegible]	[illegible]
29	[illegible]	[illegible]	[illegible]	[illegible]	AAY[illegible]4	[illegible]
30	[illegible]	[illegible]	[illegible]	[illegible]	AA[illegible]	[illegible]
31	[illegible]	[illegible]	[illegible]	[illegible]	AAB[illegible]	[illegible]
32	[illegible]	[illegible]	[illegible]	[illegible]	AAB[illegible]	[illegible]
33	[illegible]	[illegible]	[illegible]	[illegible]	AAW[illegible]	[illegible]
34	[illegible]	[illegible]	[illegible]	[illegible]	AAW[illegible]4	[illegible]
35	[illegible]	[illegible]	11	18	AAW[illegible]	[illegible]
36	[illegible]	[illegible]	11	20	AAW[illegible]	[illegible]
37	27	[illegible]	11	21	AAY[illegible]	[illegible]
38	27	[illegible]	11	22	AAB[illegible]480	[illegible]
39	27	[illegible]	12	17	AAY[illegible]	[illegible]
40	27	[illegible]	12	22	AAB[illegible]	[illegible]
41	27	[illegible]	13	18	AAW[illegible]1	[illegible]
42	27	[illegible]	14	14	AAR4[illegible]1	[illegible]
43	[illegible]	[illegible]	[illegible]	21	AAY[illegible]	[illegible]
44	[illegible]	[illegible]	[illegible]	[illegible]	AAB[illegible]	[illegible]
45	[illegible]	[illegible]	[illegible]	[illegible]	AA[illegible]	[illegible]

ALIGNMENTS

RESULT 1
AAW40937
ID AAW40937 standard; peptide; 18 AA.
XX
AC AAW40937;
XX
DT [illegible]-APR-1998 (first entry)
XX
DE Cryptic peptide [illegible]
XX
KW [illegible]
KW atopic [illegible] therapy.
XX
OS Felis sp.
XX
PN WO9735[illegible]-A1.
XX
PD 25-SEP-1997.
XX
PF 20-MAR-1997; [illegible]W[illegible].
XX
PR 24-APR-1996; [illegible].
PR 21-MAR-1996; [illegible].
XX
PA (UNIV-) [illegible]
XX
PI Kay AB, [illegible]
XX
DR WPI; 1997-4[illegible]
XX
PT Determination [illegible]
PT its [illegible]
PT useful [illegible]
XX

PS Claim 12; Fig 1; 49pp; English.
XX
CC This sequence represents a cryptic peptide of the chain 1 sequence of the
CC major cat allergen Fel d1. This sequence can be used in the method of the
CC invention. The method of the invention is for determining if a peptide of
CC a protein is a cryptic peptide, and comprises: (a) exposing T cells to
CC the peptide in a primary challenge, and measuring the reactivity of the
CC T-cells to the peptide; (b) exposing pre challenged T-cells obtained by
CC exposure to the protein, to the peptide in a secondary challenge, and
CC measuring the reactivity of the pre challenged T cells to the peptide;
CC and (c) determining the peptide to be a cryptic peptide if T cell
CC reactivity is observed in the secondary, but not in the primary,
CC challenge. Peptides identified as being cryptic can be used to diagnose
CC or treat an atopic allergy, e.g. asthma. They can also be used in to
CC screen compounds for therapeutic activity, e.g. asthma therapeutic
CC activity.
XX
SQ Sequence 16 AA;

Query Match 100.0%; Score 77; DB 18; Length 16;
Best Local Similarity 100.0%; Pred. No. 5.4e-08;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EQVAQYKALPVVLENA 16
||||||||||||||||
Db 1 eqvaqykalpvvlena 16

RESULT 2
AAY25525
ID AAY25525 standard; peptide; 16 AA.
XX
AC AAY25525;
XX
DT 30-SEP-1999 (first entry)
XX
DE Human MHC Class II desensitising peptide FC1P2.
XX
KW Major histocompatibility complex, class II, desensitising, human;
KW allergen; grass; tree; weed; pollen; fungi, mould, food, insect, sting,
KW chiromidae; spider; mite; housefly; fruit fly; sheep blow fly, honeybee,
KW screw worm fly; grain weevil; silkworm; Bee moth; larvae, mealworm, cat,
KW cockroach; beetle; dog; horse; cow; pig; sheep; rabbit; rat; guinea pig;
KW mice; gerbil; vaccine; treatment; prevention; hypersensitivity.
XX
OS Synthetic.
XX
PN WO9934826-A1.
XX
PD 15-JUL-1999.
XX
PF 11-JAN 1999; 99WO-GB00080.
XX
PR 21-SEP-1998; 98GB-0020474.
PR 09-JAN-1998; 98GB-0000445.
XX
PA (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.
XX
PI Kay AB, Larche M;
XX
DR WPI; 1999-458255/38.
XX
PT Desensitizing patients to polypeptide allergens
XX
PS Claim 6; Figure 9; 117pp; English.
XX
CC This invention describes a novel method of desensitizing a patient to a
CC polypeptide allergen and comprises administering to the patient a peptide
CC derived from the allergen where restriction to a MHC Class II molecule
CC possessed by the patient can be demonstrated for the peptide and the
CC peptide is able to induce a late phase response in an individual who
CC possesses the MHC Class II molecule. The methods can be used for
CC desensitising patients to allergens present in e.g. grass, tree and weed
CC (including ragweed) pollens, fungi and moulds, foods, stinging insects,
CC the chiromidae (non-biting midges), spiders and mites, housefly, fruit
CC fly, sheep blow fly, screw worm fly, grain weevil, silkworm, honeybee,
CC non biting midge larvae, bee moth larvae, mealworm, cat, cockroach, larvae of
CC tenibrio molitor beetle, mammals such as cat, dog, horse, cow, pig,
CC sheep, rabbit, rat, guinea pig, mice or gerbil. They can also be used to
CC produce immunological vaccines which may be used to prevent and/or treat
CC conditions involving hypersensitivity to allergens. This sequence
CC represents a peptide used to desensitise the human major
CC histocombatibility complex (MHC) class II response to the Fel d1 chain 1
CC allergen.
XX
SQ Sequence 16 AA;

Query Match 100.0%; Score 77; DB 20; Length 16;
Best Local Similarity 100.0%; Pred. No. 5.4e-08;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EQVAQYKALPVVLENA 16
||||||||||||||||
Db 1 eqvaqykalpvvlena 16

RESULT 3
AAW40979
ID AAW40979 standard; peptide; 14 AA.
XX
AC AAW40979;
XX
DT 09-APR-1998 (first entry)
XX
DE Cryptic peptide of major cat allergen Fel d1.
XX
KW Major cat allergen; Fel d1; chain 1; cryptic peptide; T-cell; asthma;
KW atopic allergy; therapy.
XX
OS Felis sp.
XX
PN WO9735193-A1.
XX
PD 25-SEP-1997.
XX
PF 20-MAR-1997; 97WO-GB00783.
XX
PR 24-APR-1996; 96GB-0008430.
PR 21-MAR-1996; 96GB-0005904.
XX
PA (UNIO-) IMPERIAL COLLEGE SCI TECHNOLOGY & MED.
XX
PI Kay AB, Larche M;
XX
DR WPI; 1997-480354/44.
XX
PT Determining if peptide of protein is cryptic peptide - by comparing
PT its reactivity with pre-challenged and non-pre-challenged T cells,
PT useful to diagnose or treat atopic condition, e.g. asthma
XX
PS Claim 12; Page 30; 49pp; English.
XX
CC This sequence represents a cryptic peptide of the major cat allergen
CC Fel d1. This sequence can be used in the method of the invention. The
CC method of the invention is for determining if a peptide of a protein is a
CC cryptic peptide, and comprises: (a) exposing T cells to the peptide in a
CC primary challenge, and measuring the reactivity of the T-cells to the
CC peptide; (b) exposing pre challenged T cells, obtained by exposure to the
CC protein, to the peptide in a secondary challenge, and measuring the
CC reactivity of the pre-challenged T-cells to the peptide; and
CC (c) determining the peptide to be a cryptic peptide if T cell reactivity
CC is observed in the secondary, but not in the primary challenge. Peptides
CC identified as being cryptic can be used to diagnose or treat an atopic
CC allergy, e.g. asthma. They can also be used in to screen compounds for

```
XX   therapeutic activity, e.g. asthma therapeutic activity.
XX
SQ   Sequence   14 AA;


  Query Match             88.4%;  Score 53;  DB 14;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 2.5e-06;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    1;  Gaps    0;

Qy       2 LVAQYKALPVVIEN 15
           | | | | | | | |
Db       1 LQAQYKALPVVIEN 14


RESULT   4
AAW40978
ID   AAW40978 standard; peptide; 14 AA.
XX
AC   AAW40978;
XX
DT   09-APR-1998  (first entry)
XX
DE   Cryptic peptide of major cat allergen Fel dI
XX
KW   Major cat allergen; Fel dI; chain 1; cryptic peptide; T-cell; asthma;
KW   atopic allergy; therapy.
XX
OS   Felis sp.
XX
PN   WO9735193-A1.
XX
PD   25-SEP-1997.
XX
PF   20-MAR-1997;   97WO-GB00783.
XX
PR   24-APR-1996;   96GB-00008453.
PR   21-MAR-1996;   96GB-00005904.
XX
PA   (UNIC-) IMPERIAL COLLEGE SCI TECHNOLOGY & MED.
XX
PI   Kay AB, Larche M;
XX
DR   WPI; 1997-4#0454/44.
XX
PI   Determining if peptide of protein is cryptic peptide - by comparing
PI   its reactivity with pre-challenged and non-pre-challenged T cells,
PI   useful to diagnose or treat atopic condition, e.g. asthma
XX
CS   Claim 12; Page 40; 49pp; English.
XX
CC   This sequence represents a cryptic peptide of the major cat allergen
CC   Fel dI. This sequence can be used in the method of the invention. The
CC   method of the invention is for determining if a peptide of a protein is a
CC   cryptic peptide, and comprises: (a) exposing T-cells to the peptide in a
CC   primary challenge, and measuring the reactivity of the T cells to the
CC   peptide; (b) exposing pre-challenged T-cells, obtained by exposure to the
CC   protein, to the peptide in a secondary challenge, and measuring the
CC   reactivity of the pre-challenged T-cells to the peptide; and
CC   (c) determining the peptide to be a cryptic peptide if T-cell reactivity
CC   is observed in the secondary, but not in the primary challenge. Peptides
CC   identified as being cryptic can be used to diagnose or treat an atopic
CC   allergy, e.g. asthma. They can also be used in to screen compounds for
CC   therapeutic activity, e.g. asthma therapeutic activity.
XX
SQ   Sequence   14 AA;


  Query Match             87.0%;  Score 67;  DB 18;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 3.9e-06;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 EVAQYKALPVVIEN 14
           | | | | | | | | | | | | | |
Db       1 EVAQYKALPVVIEN 14


RESULT   5
AAW40980
ID   AAW40980 standard; peptide; 14 AA.
XX
AC   AAW40980;
XX
DT   09-APR-1998  (first entry)
XX
DE   Cryptic peptide of major cat allergen Fel dI
XX
KW   Major cat allergen; Fel dI; chain 1; cryptic peptide; T-cell; asthma;
KW   atopic allergy; therapy.
XX
OS   Felis sp.
XX
PN   WO9735193-A1.
XX
PD   25-SEP-1997.
XX
PF   20-MAR-1997;   97WO-GB00783.
XX
PR   24-APR-1996;   96GB-00008453.
PR   21-MAR-1996;   96GB-00005904.
XX
PA   (UNIC-) IMPERIAL COLLEGE SCI TECHNOLOGY & MED.
XX
PI   Kay AB, Larche M;
XX
DR   WPI; 1997-4#0454/44.
XX
PI   Determining if peptide of protein is cryptic peptide - by comparing
PI   its reactivity with pre-challenged and non-pre-challenged T cells,
PI   useful to diagnose or treat atopic condition, e.g. asthma
XX
CS   Claim 12; Page 40; 49pp; English.
XX
CC   This sequence represents a cryptic peptide of the major cat allergen
CC   Fel dI. This sequence can be used in the method of the invention. The
CC   method of the invention is for determining if a peptide of a protein is a
CC   cryptic peptide, and comprises: (a) exposing T-cells to the peptide in a
CC   primary challenge, and measuring the reactivity of the T cells to the
CC   peptide; (b) exposing pre-challenged T-cells, obtained by exposure to the
CC   protein, to the peptide in a secondary challenge, and measuring the
CC   reactivity of the pre-challenged T-cells to the peptide; and
CC   (c) determining the peptide to be a cryptic peptide if T-cell reactivity
CC   is observed in the secondary, but not in the primary challenge. Peptides
CC   identified as being cryptic can be used to diagnose or treat an atopic
CC   allergy, e.g. asthma. They can also be used in to screen compounds for
CC   therapeutic activity, e.g. asthma therapeutic activity.
XX
SQ   Sequence   14 AA;


  Query Match             87.0%;  Score 67;  DB 18;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 3.9e-06;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 EVAQYKALPVVIEN 14
           | | | | | | | | | | | | | |
Db       1 EVAQYKALPVVIEN 14


RESULT   6
AAW40981
ID   AAW40981 standard; peptide; 14 AA.
XX
AC   AAW40981;
XX
DT   09-APR-1998  (first entry)
XX
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DE   Cryptic peptide of major cat allergen Fel d1.
XX
KW   Major cat allergen; Fel d1; chain 1; cryptic peptide; T cell; asthma;
KW   atopic allergy; therapy.
XX
OS   Felis sp.
XX
PN   WO9735193-A1.
XX
PD   25-SEP-1997.
XX
PF   20-MAR-1997;   97WO-GB00783.
XX
PR   24-APR-1996;   96GB-0008430.
PR   21-MAR-1996;   96GB-0005904.
XX
PA   (UNLO ) IMPERIAL COLLEGE SCI TECHNOLOGY & MED.
XX
PI   Kay AB,  Larche M;
XX
DR   WPI; 1997-480354/44.
XX
PT   Determining if peptide of protein is cryptic peptide - by comparing
PT   its reactivity with pre-challenged and non-pre-challenged T cells,
PT   useful to diagnose or treat atopic condition, e.g. asthma
XX
PS   Claim 12; Page 31; 49pp; English.
XX
CC   This sequence represents a cryptic peptide of the major cat allergen
CC   Fel d1. This sequence can be used in the method of the invention. The
CC   method of the invention is for determining if a peptide of a protein is a
CC   cryptic peptide, and comprises: (a) exposing T-cells to the peptide in a
CC   primary challenge, and measuring the reactivity of the T-cells to the
CC   peptide; (b) exposing pre-challenged T-cells, obtained by exposure to the
CC   protein, to the peptide in a secondary challenge, and measuring the
CC   reactivity of the pre-challenged T-cells to the peptide; and
CC   (c) determining the peptide to be a cryptic peptide if T-cell reactivity
CC   is observed in the secondary, but not in the primary challenge. Peptides
CC   identified as being cryptic can be used to diagnose or treat an atopic
CC   allergy, e.g. asthma. They can also be used in to screen compounds for
CC   therapeutic activity, e.g. asthma therapeutic activity.
XX
SQ   Sequence   14 AA;


  Query Match             81.8%;  Score 63;  DB 18;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-05;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       4 AQYKALPVVLENA 16
           |||||||||||||
Db       1 aqykalpvvlena 13


RESULT   7
AAW40977
ID   AAW40977 standard; peptide; 14 AA.
XX
AC   AAW40977;
XX
DT   09-APR-1998  (first entry)
XX
DE   Cryptic peptide of major cat allergen Fel d1.
XX
KW   Major cat allergen; Fel d1; chain 1; cryptic peptide; T cell; asthma;
KW   atopic allergy; therapy.
XX
OS   Felis sp.
XX
PN   WO9735193-A1.
XX
PD   25-SEP-1997.
XX
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PF   20-MAR-1997;   97WO-GB00783.
XX
PR   24-APR-1996;   96GB-0008430.
PR   21-MAR-1996;   96GB-0005904.
XX
PA   (UNLO ) IMPERIAL COLLEGE SCI TECHNOLOGY & MED.
XX
PI   Kay AB,  Larche M;
XX
DR   WPI; 1997-480354/44.
XX
PT   Determining if peptide of protein is cryptic peptide - by comparing
PT   its reactivity with pre-challenged and non-pre-challenged T cells,
PT   useful to diagnose or treat atopic condition, e.g. asthma
XX
PS   Claim 12; Page 30; 49pp; English.
XX
CC   This sequence represents a cryptic peptide of the major cat allergen
CC   Fel d1. This sequence can be used in the method of the invention. The
CC   method of the invention is for determining if a peptide of a protein is a
CC   cryptic peptide, and comprises: (a) exposing T-cells to the peptide in a
CC   primary challenge, and measuring the reactivity of the T-cells to the
CC   peptide; (b) exposing pre-challenged T cells, obtained by exposure to the
CC   protein, to the peptide in a secondary challenge, and measuring the
CC   reactivity of the pre-challenged T-cells to the peptide; and
CC   (c) determining the peptide to be a cryptic peptide if T cell reactivity
CC   is observed in the secondary, but not in the primary challenge. Peptides
CC   identified as being cryptic can be used to diagnose or treat an atopic
CC   allergy, e.g. asthma. They can also be used in to screen compounds for
CC   therapeutic activity, e.g. asthma therapeutic activity.
XX
SQ   Sequence   14 AA;


  Query Match             80.5%;  Score 62;  DB 18;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 3.5e-05;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 EQVAQYKALPVVL 13
           |||||||||||||
Db       2 eqvaqykalpvvl 14


RESULT   8
AAW40982
ID   AAW40982 standard; peptide; 14 AA.
XX
AC   AAW40982;
XX
DT   09-APR-1998  (first entry)
XX
DE   Cryptic peptide of major cat allergen Fel d1.
XX
KW   Major cat allergen; Fel d1; chain 1; cryptic peptide; T cell; asthma;
KW   atopic allergy; therapy.
XX
OS   Felis sp.
XX
PN   WO9735193-A1.
XX
PD   25-SEP-1997.
XX
PF   20-MAR-1997;   97WO-GB00783.
XX
PR   24-APR-1996;   96GB-0008430.
PR   21-MAR-1996;   96GB-0005904.
XX
PA   (UNLO ) IMPERIAL COLLEGE SCI TECHNOLOGY & MED.
XX
PI   Kay AB,  Larche M;
XX
DR   WPI; 1997-480354/44.
XX
```

PT Determining if peptide or protein is cryptic peptide - by comparing
PT its reactivity with pre-challenged and non pre-challenged T cells,
PT useful to diagnose or treat atopic condition, e.g. asthma
XX
PN Claim 12; Page 81; 49pp; English.
XX
CC This sequence represents a cryptic peptide of the major cat allergen
CC Fel d1. This sequence can be used in the method of the invention. The
CC method of the invention is for determining if a peptide of a protein is a
CC cryptic peptide, and comprises: (a) exposing T-cells to the peptide in a
CC primary challenge, and measuring the reactivity of the T-cells to the
CC peptide; (b) exposing pre-challenged T-cells, obtained by exposure to the
CC protein, to the peptide in a secondary challenge, and measuring the
CC reactivity of the pre-challenged T-cells to the peptide; and
CC (c) determining the peptide to be a cryptic peptide if T-cell reactivity
CC is observed in the secondary, but not in the primary challenge. Peptides
CC identified as being cryptic can be used to diagnose or treat an atopic
CC allergy, e.g. asthma. They can also be used in to screen compounds for
CC therapeutic activity, e.g. asthma therapeutic activity.
XX
SQ Sequence 14 AA;

Query Match 76.6%; Score 59; DB 13; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.00013;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 5 QYKALPVVLENA 16
Db 1 QYKALPVVLENA 12

RESULT 9
AAW40974
ID AAW40974 standard; peptide; 14 AA.
XX
AC AAW40974;
XX
DT 09-APR-1998 (first entry)
XX
DE Cryptic peptide of major cat allergen Fel d1
XX
KW Major cat allergen; Fel d1; chain 1; cryptic peptide; T-cell; asthma;
KW atopic allergy; therapy.
XX
OS Felis sp.
XX
PN WO9745134-A1.
XX
PD 25-SEP-1997.
XX
PF 20-MAR-1997; 97WO-GB000783.
XX
PR 24-APR-1996; 96GB-0008484.
PR 21-MAR-1996; 96GB-0005904.
XX
PA (UNIG) IMPERIAL COLLEGE SCI TECHN MEDICINE.
XX
PI Kay AB, Larche M;
XX
DR WPI; 1997-480454/44.
XX
PT Determining if peptide or protein is cryptic peptide - by comparing
PT its reactivity with pre-challenged and non pre-challenged T cells,
PT useful to diagnose or treat atopic condition, e.g. asthma
XX
PS Claim 1; Page 2; 49pp; English.
XX
CC This sequence represents a cryptic peptide of the major cat allergen
CC Fel d1. This sequence can be used in the method of the invention. The
CC method of the invention is for determining if a peptide of a protein is a
CC cryptic peptide, and comprises: (a) exposing T-cells to the peptide in a
CC primary challenge, and measuring the reactivity of the T-cells to the

CC peptide; (b) exposing pre-challenged T-cells, obtained by exposure to the
CC protein, to the peptide in a secondary challenge, and measuring the
CC reactivity of the pre-challenged T-cells to the peptide; and
CC (c) determining the peptide to be a cryptic peptide if T-cell reactivity
CC is observed in the secondary, but not in the primary challenge. Peptides
CC identified as being cryptic can be used to diagnose or treat an atopic
CC allergy, e.g. asthma. They can also be used in to screen compounds for
CC therapeutic activity, e.g. asthma therapeutic activity.
XX
SQ Sequence 14 AA;

Query Match 76.6%; Score 59; DB 13; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.00013;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 5 QYKALPVVLENA 16
Db 1 QYKALPVVLENA 12

RESULT 10
AAW40975
ID AAW40975 standard; peptide; 14 AA.
XX
AC AAW40975;
XX
DT 09-APR-1998 (first entry)
XX
DE Cryptic peptide of major cat allergen
XX
KW Major cat allergen; Fel d1; chain 1; cryptic peptide; T-cell; asthma;
KW atopic allergy; therapy.
XX
OS Felis sp.
XX
PN WO9745134-A1.
XX
PD 25-SEP-1997.
XX
PF 20-MAR-1997; 97WO-GB000783.
XX
PR 24-APR-1996; 96GB-0008484.
PR 21-MAR-1996; 96GB-0005904.
XX
PA (UNIG) IMPERIAL COLLEGE SCI TECHN MEDICINE.
XX
PI Kay AB, Larche M;
XX
DR WPI; 1997-480454/44.
XX
PT Determining if peptide or protein is cryptic peptide - by comparing
PT its reactivity with pre-challenged and non pre-challenged T cells,
PT useful to diagnose or treat atopic condition, e.g. asthma
XX
PS Claim 12; Page 83; 49pp; English.
XX
CC This sequence represents a cryptic peptide of the major cat allergen
CC Fel d1. This sequence can be used in the method of the invention. The
CC method of the invention is for determining if a peptide of a protein is a
CC cryptic peptide, and comprises: (a) exposing T-cells to the peptide in a
CC primary challenge, and measuring the reactivity of the T-cells to the
CC peptide; (b) exposing pre-challenged T-cells, obtained by exposure to the
CC protein, to the peptide in a secondary challenge, and measuring the
CC reactivity of the pre-challenged T-cells to the peptide; and
CC (c) determining the peptide to be a cryptic peptide if T-cell reactivity
CC is observed in the secondary, but not in the primary challenge. Peptides
CC identified as being cryptic can be used to diagnose or treat an atopic
CC allergy, e.g. asthma. They can also be used in to screen compounds for
CC therapeutic activity, e.g. asthma therapeutic activity.
XX
SQ Sequence 14 AA;

```
  Query Match             70.1%;  Score 54;  DB 18;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 0.0012;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 EQVAQYKALPV 11
           ||||||||||| 
Db       4 eqvaqykalpv 14


RESULT  11
AAW40983
ID   AAW40983 standard; peptide; 14 AA.
XX
AC   AAW40983;
XX
DT   09-APR-1998  (first entry)
XX
DE   Cryptic peptide of major cat allergen Fel dI.
XX
KW   Major cat allergen; Fel dI; chain 1; cryptic peptide; T-cell; asthma;
KW   atopic allergy; therapy.
XX
OS   Felis sp.
XX
PN   WO9735193-A1.
XX
PD   25-SEP-1997.
XX
PF   20-MAR-1997;   97WO-GB00783.
XX
PR   24-APR-1996;   96GB-0008430.
PR   21-MAR-1996;   96GB-0005904.
XX
PA   (UNLO ) IMPERIAL COLLEGE SCI TECHNOLOGY & MED.
XX
PI   Kay AB,  Larche M;
XX
DR   WPI; 1997-480354/44.
XX
PT   Determining if peptide of protein is cryptic peptide - by comparing
PT   its reactivity with pre-challenged and non pre-challenged T cells,
PT   useful to diagnose or treat atopic condition, e.g. asthma
XX
PS   Claim 12; Page 91; 49pp; English.
XX
CC   This sequence represents a cryptic peptide of the major cat allergen
CC   Fel dI. This sequence can be used in the method of the invention. the
CC   method of the invention is for determining if a peptide or a protein is a
CC   cryptic peptide, and comprises: (a) exposing T cells to the peptide in a
CC   primary challenge, and measuring the reactivity of the T cells to the
CC   peptide; (b) exposing pre-challenged T cells, obtained by exposure to the
CC   protein, to the peptide in a secondary challenge, and measuring the
CC   reactivity of the pre-challenged T-cells to the peptide; and
CC   (c) determining the peptide to be a cryptic peptide if T-cell reactivity
CC   is observed in the secondary, but not in the primary challenge. Peptides
CC   identified as being cryptic can be used to diagnose or treat an atopic
CC   allergy, e.g. asthma. They can also be used in to screen compounds for
CC   therapeutic activity, e.g. asthma therapeutic activity.
XX
SQ   Sequence   14 AA;


  Query Match             70.1%;  Score 54;  DB 18;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 0.0012;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       6 YKALPVVLENA 16
           ||||||||||| 
Db       1 ykalpvvlena 11


RESULT  12
```

```
AAW40938
ID   AAW40938 standard; peptide; 15 AA.
XX
AC   AAW40938;
XX
DT   09-APR-1998  (first entry)
XX
DE   Cryptic peptide 5 of chain 1 of major cat allergen Fel dI.
XX
KW   Major cat allergen; Fel dI; chain 1; cryptic peptide; T-cell; asthma;
KW   atopic allergy; therapy.
XX
OS   Felis sp.
XX
PN   WO9735193-A1.
XX
PD   25-SEP-1997.
XX
PF   20-MAR-1997;   97WO-GB00783.
XX
PR   24-APR-1996;   96GB-0008430.
PR   21-MAR-1996;   96GB-0005904.
XX
PA   (UNLO ) IMPERIAL COLLEGE SCI TECHNOLOGY & MED.
XX
PI   Kay AB,  Larche M;
XX
DR   WPI; 1997-480354/44.
XX
PT   Determining if peptide of protein is cryptic peptide - by comparing
PT   its reactivity with pre-challenged and non-pre-challenged T cells,
PT   useful to diagnose or treat atopic condition, e.g. asthma
XX
PS   Claim 12; Fig 1; 49pp; English.
XX
CC   This sequence represents a cryptic peptide of the chain 1 sequence of the
CC   major cat allergen Fel dI. This sequence can be used in the method of the
CC   invention. The method of the invention is for determining if a peptide or
CC   a protein is a cryptic peptide, and comprises: (a) exposing T-cells to
CC   the peptide in a primary challenge, and measuring the reactivity of the
CC   T cells to the peptide; (b) exposing pre-challenged T-cells, obtained by
CC   exposure to the protein, to the peptide in a secondary challenge, and
CC   measuring the reactivity of the pre-challenged T cells to the peptide;
CC   and (c) determining the peptide to be a cryptic peptide if T-cell
CC   reactivity is observed in the secondary, but not in the primary
CC   challenge. Peptides identified as being cryptic can be used to diagnose
CC   or treat an atopic allergy, e.g. asthma. They can also be used in to
CC   screen compounds for therapeutic activity, e.g. asthma therapeutic
CC   activity.
XX
SQ   Sequence   15 AA;


  Query Match             70.1%;  Score 54;  DB 18;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 0.0013;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       6 YKALPVVLENA 16
           ||||||||||| 
Db       1 ykalpvvlena 11


RESULT  13
AAW40974
ID   AAW40974 standard; peptide; 14 AA.
XX
AC   AAW40974;
XX
DT   09-APR-1998  (first entry)
XX
DE   Cryptic peptide of major cat allergen Fel dI.
XX
KW   Major cat allergen; Fel dI; chain 1; cryptic peptide; T-cell; asthma;
```

KW atopic allergy; therapy.
XX
OS Felis sp.
XX
PN WO9735883-A1.
XX
PD 25-SEP-1997.
XX
PF 20-MAR-1997; 97WO-GB00784.
XX
PR 24-APR-1996; 96GB-0008430.
PR 21-MAR-1996; 96GB-0005904.
XX
PA (UNIL) IMPERIAL COLLEGE SCI TECHNOL MED.
XX
PI Kay AB, Larche M;
XX
DR WPI; 1997-480454/44.
XX
PT Determining if peptide or protein is cryptic peptide - by comparing
PT its reactivity with pre-challenged and non pre-challenged T cells,
PT useful to diagnose or treat atopic condition, e.g. asthma
XX
PS Claim 12; Page 29; 49pp; English.
XX
CC This sequence represents a cryptic peptide of the major cat allergen
CC Fel dI. This sequence can be used in the method of the invention. The
CC method of the invention is for determining if a peptide of a protein is a
CC cryptic peptide, and comprises: (a) exposing T-cells to the peptide in a
CC primary challenge, and measuring the reactivity of the T cells to the
CC peptide; (b) exposing pre-challenged T-cells, obtained by exposure to the
CC protein, to the peptide in a secondary challenge, and measuring the
CC reactivity of the pre-challenged T-cells to the peptide; and
CC (c) determining the peptide to be a cryptic peptide if T cell reactivity
CC is observed in the secondary, but not in the primary challenge. Peptides
CC identified as being cryptic can be used to diagnose or treat an atopic
CC allergy, e.g. asthma. They can also be used in to screen compounds for
CC therapeutic activity, e.g. asthma therapeutic activity.
XX
SQ Sequence 14 AA;

Query Match 64.9%; Score 58; DB 18; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.0071;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FQVAQYKALP 10
|||||||||||
Db 5 FQVAQYKALP 14

RESULT 14
AAW40984
ID AAW40984 standard; peptide; 14 AA.
XX
AC AAW40984;
XX
DT 09-APR-1998 (first entry)
XX
DE Cryptic peptide of major cat allergen Fel dI.
XX
KW Major cat allergen; Fel dI; chain 1; cryptic peptide; T cell; asthma;
KW atopic allergy; therapy.
XX
OS Felis sp.
XX
PN WO9735883-A1.
XX
PD 25-SEP-1997.
XX
PF 20-MAR-1997; 97WO-GB00784.
XX
PR 24-APR-1996; 96GB-0008430.
PR 21-MAR-1996; 96GB-0005904.
XX
PA (UNIL) IMPERIAL COLLEGE SCI TECHNOL MED.
XX
PI Kay AB, Larche M;
XX
DR WPI; 1997-480454/44.
XX
PT Determining if peptide or protein is cryptic peptide - by comparing
PT its reactivity with pre-challenged and non pre-challenged T cells,
PT useful to diagnose or treat atopic condition, e.g. asthma
XX
PS Claim 12; Page 29; 49pp; English.
XX
CC This sequence represents a cryptic peptide of the major cat allergen
CC Fel dI. This sequence can be used in the method of the invention. The
CC method of the invention is for determining if a peptide of a protein is a
CC cryptic peptide, and comprises: (a) exposing T-cells to the peptide in a
CC primary challenge, and measuring the reactivity of the T cells to the
CC peptide; (b) exposing pre-challenged T-cells, obtained by exposure to the
CC protein, to the peptide in a secondary challenge, and measuring the
CC reactivity of the pre-challenged T-cells to the peptide; and
CC (c) determining the peptide to be a cryptic peptide if T cell reactivity
CC is observed in the secondary, but not in the primary challenge. Peptides
CC identified as being cryptic can be used to diagnose or treat an atopic
CC allergy, e.g. asthma. They can also be used in to screen compounds for
CC therapeutic activity, e.g. asthma therapeutic activity.
XX
SQ Sequence 14 AA;

Query Match 64.9%; Score 58; DB 18; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.0071;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FQVAQYKALP 10
|||||||||||
Db 5 FQVAQYKALP 14

RESULT 15
AAW40973
ID AAW40973 standard; peptide; 14 AA.
XX
AC AAW40973;
XX
DT 09-APR-1998 (first entry)
XX
DE Cryptic peptide of major cat allergen Fe
XX
KW Major cat allergen; Fel dI; chain 1; cr
KW atopic allergy; therapy.
XX
OS Felis sp.
XX
PN WO9735883-A1.
XX
PD 25-SEP-1997.
XX
PF 20-MAR-1997; 97WO-GB00784.
XX
PR 24-APR-1996; 96GB-0008430.
PR 21-MAR-1996; 96GB-0005904.
XX
PA (UNIL) IMPERIAL COLLEGE SCI TECHNOL MED.
XX
PI Kay AB, Larche M
XX
DR WPI; 1997-480454/44.
XX
PI Determining if peptide or protein is cr
PI its reactivity with pre-challenged and
PI useful to diagnose or treat atopic cond

XX
PS Claim 12; Page 28; 49pp; English.
XX
CC This sequence represents a cryptic peptide of the major cat allergen
CC Fel d1. This sequence can be used in the method of the invention. The
CC method of the invention is for determining if a peptide of a protein is a
CC cryptic peptide, and comprises: (a) exposing T-cells to the peptide in a
CC primary challenge, and measuring the reactivity of the T-cells to the
CC peptide, (b) exposing pre-challenged T cells, obtained by exposure to the
CC protein, to the peptide in a secondary challenge, and measuring the
CC reactivity of the pre-challenged T-cells to the peptide; and
CC (c) determining the peptide to be a cryptic peptide if T cell reactivity
CC is observed in the secondary, but not in the primary challenge. Peptides
CC identified as being cryptic can be used to diagnose or treat an atopic
CC allergy, e.g. asthma. They can also be used in to screen compounds for
CC therapeutic activity, e.g. asthma therapeutic activity.
XX
SQ Sequence 14 AA;

Query Match 55.8%; Score 43; DB 18; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.16;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EQVAQYKAL 9
||||||||| |
Db 6 eqvaqykal 14

Search completed: July 17, 2002, 11:15:17
Job time: 237 sec

GenCore version 4.5 [illegible]
Copyright (c) [illegible] Compugen Ltd.

OM protein - protein search, using sw model

Run on: [illegible] Search time [illegible] Seconds
(without alignments)
[illegible] Million cell updates/sec

Title: US-09-610-134-1
Perfect score: 89
Sequence: 1 LFLIGTPDEYVEQVAQY 17

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 747574 seqs, 111.73796 residues

Total number of hits satisfying chosen parameters: [illegible]

Minimum DB seq length: [illegible]
Maximum DB seq length: 17

Post-processing: Minimum Match [illegible]
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_032802:*
[illegible]

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	[illegible]	[illegible]	17	[illegible]	AAW4[illegible]954	Cryptic peptide [illegible]
2	[illegible]	[illegible]	17	2	AAY2[illegible]21	Human [illegible]
3	[illegible]	[illegible]	14	[illegible]	AAW4[illegible]	Cryptic peptide [illegible]
4	[illegible]	[illegible]	14	[illegible]	AAW4[illegible]	Cryptic peptide [illegible]
5	[illegible]	[illegible]	14	[illegible]	AAW4[illegible]	Cryptic peptide [illegible]
6	[illegible]	[illegible]	17	21	AAB2[illegible]	[illegible]
7	[illegible]	[illegible]	17	21	AAY[illegible]	[illegible]
8	[illegible]	[illegible]	17	21	AAY[illegible]	[illegible]
9	[illegible]	[illegible]	17	21	AAY[illegible]	[illegible]
10	[illegible]	[illegible]	14	[illegible]	AAW4[illegible]	Cryptic peptide [illegible]
11	[illegible]	[illegible]	14	[illegible]	AAW4[illegible]	Cryptic peptide [illegible]
12–45	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

ALIGNMENTS

RESULT 1
AAW4[illegible]954
ID AAW4[illegible] [illegible]
XX
AC AAW40954;
XX
DT [illegible] (first entry)
XX
DE Cryptic peptide [illegible]
XX
KW [illegible]
KW [illegible]
XX
OS Felis sp.
XX
PN W[illegible]
XX
PD [illegible]
XX
PF [illegible] MAR [illegible]
XX
PR [illegible] APR [illegible]
PR [illegible] MAR [illegible]
XX
PA [illegible]
XX
PI [illegible]
XX
DR WPI; [illegible]
XX
PT [illegible]
PT [illegible]
PT [illegible]
XX

PS Claim 12; Page 23; 49pp; English.
XX
CC This sequence represents a cryptic peptide of the major cat allergen
CC Fel dI. This sequence can be used in the method of the invention. The
CC method of the invention is for determining if a peptide of a protein is a
CC cryptic peptide, and comprises. (a) exposing T cells to the peptide in a
CC primary challenge, and measuring the reactivity of the T cells to the
CC peptide; (b) exposing pre-challenged T cells, obtained by exposure to the
CC protein, to the peptide in a secondary challenge, and measuring the
CC reactivity of the pre-challenged T-cells to the peptide; and
CC (c) determining the peptide to be a cryptic peptide if T-cell reactivity
CC is observed in the secondary, but not in the primary challenge. Peptides
CC identified as being cryptic can be used to diagnose or treat an atopic
CC allergy, e.g. asthma. They can also be used in to screen compounds for
CC therapeutic activity, e.g. asthma therapeutic activity.
XX
SQ Sequence 17 AA;

Query Match 100.0%; Score 89; DB 18; Length 17;
Best Local Similarity 100.0%; Pred. No. 4.5e-08;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LFLTGTPDEYVEQVAQY 17
|||||||||||||||||
Db 1 lfltgtpdeyveqvaqy 17

RESULT 2
AAY25524
ID AAY25524 standard; peptide; 17 AA.
XX
AC AAY25524;
XX
DT 30-SEP-1999 (first entry)
XX
DE Human MHC Class II desensitising peptide FC1P1.
XX
KW Major histocompatibility complex, class II; desensitising, human,
KW allergen, grass, tree, weed, pollen, fungi, mould, food, insect, sting;
KW chiromidae; spider; mite; housefly; fruit fly; sheep blow fly; honeybee;
KW screw worm fly; grain weevil; silkworm; bee moth; larvae; mealworm; cat;
KW cockroach, beetle, dog, horse, cow, pig, sheep, rabbit, rat, guinea pig,
KW mice, peptide, vaccine, treatment, prevention, hypersensitivity.
XX
OS Synthetic.
XX
PN WO9934826-A1.
XX
PD 15-JUL-1999.
XX
PF 11-JAN-1999; 99WO-GB00080.
XX
PR 21-SEP-1998; 98GB-0020474.
PR 09-JAN-1998; 98GB-0000445.
XX
PA (IMCO) IMPERIAL COLLEGE INNOVATIONS LTD.
XX
PI Kay AB, Larche M;
XX
DR WPI, 1999-459255/39.
XX
PT Desensitizing patients to polypeptide allergens
XX
PS Claim 6; Figure 9; 117pp; English.
XX
CC This invention describes a novel method of desensitizing a patient to a
CC polypeptide allergen and comprises administering to the patient a peptide
CC derived from the allergen where restriction to a MHC Class II molecule
CC possessed by the patient can be demonstrated for the peptide and the
CC peptide is able to induce a late phase response in an individual who
CC possesses the MHC class II molecule. The methods can be used to:
CC desensitising patients to allergens present in e.g. grass, tree and weed
CC (including ragweed) pollens, fungi and moulds, foods, stinging insects,
CC the chiromidae (non-biting midges), spiders and mites, housefly, fruit
CC fly, sheep blow fly, screw worm fly, grain weevil, silkworm, honeybee,
CC non biting midge larvae, bee moth larvae, mealworm, cockroach, larvae of
CC Tenibric molitor beetle, mammals such as cat, dog, horse, cow, pig,
CC sheep, rabbit, rat, guinea pig, mice or gerbil. They can also be used to
CC produce immunological reagents which may be used to prevent pollen treat
CC conditions involving hypersensitivity to allergens. This sequence
CC represents a peptide used to desensitise the human major
CC histocompatibility complex (MHC) class II response to the Fel dI Chain 1
CC allergen.
XX
SQ Sequence 17 AA;

Query Match 100.0%; Score 89; DB 20; Length 17;
Best Local Similarity 100.0%; Pred. No. 4.5e-08;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LFLTGTPDEYVEQVAQY 17
|||||||||||||||||
Db 1 lfltgtpdeyveqvaqy 17

RESULT 3
AAW40970
ID AAW40970 standard; peptide; 14 AA.
XX
AC AAW40970;
XX
DT 09-APR-1998 (first entry)
XX
DE Cryptic peptide of major cat allergen Fel dI.
XX
KW Major cat allergen; Fel dI; chain 1; cryptic peptide; T cell; asthma;
KW atopic allergy; therapy.
XX
OS Felis sp.
XX
PN WO9745192-A1.
XX
PD 25-SEP-1997.
XX
PF 20-MAR-1997; 97WO-GB00783.
XX
PR 24-APR-1996; 96GB-0008430.
PR 21-MAR-1996; 96GB-0005904.
XX
PA (UNIO) IMPERIAL COLLEGE SCI TECHNOLOGY & MED.
XX
PI Kay AB, Larche M;
XX
DR WPI, 1997-488354/44.
XX
PT Determining if peptide of protein is cryptic peptide - by comparing
PT its reactivity with pre challenged and non pre challenged T cells,
PT useful to diagnose or treat atopic condition, e.g. asthma
XX
PS Claim 12; Page 28; 49pp; English.
XX
CC This sequence represents a cryptic peptide of the major cat allergen
CC Fel dI. This sequence can be used in the method of the invention. The
CC method of the invention is for determining if a peptide of a protein is a
CC cryptic peptide, and comprises. (a) exposing T cells to the peptide in a
CC primary challenge, and measuring the reactivity of the T cells to the
CC peptide, (b) exposing pre-challenged T cells, obtained by exposure to the
CC protein, to the peptide in a secondary challenge, and measuring the
CC reactivity of the pre-challenged T cells to the peptide; and
CC (c) determining the peptide to be a cryptic peptide if T cell reactivity
CC is observed in the secondary, but not in the primary challenge. Peptides
CC identified as being cryptic can be used to diagnose or treat an atopic
CC allergy, e.g. asthma. They can also be used in to screen compounds for
CC therapeutic activity, e.g. asthma therapeutic activity.

```
XX
SQ   Sequence   14 AA;

  Query Match              84.3%;  Score 75;  DB 19;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 7.7e-06;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          4 [illegible]EYVEQVAQY 17
Db          1 [illegible]eyveqvaqy 14

RESULT 4
AAW4[illegible]967
ID   AAW4[illegible]967 standard; peptide; 14 AA.
XX
AC   AAW4[illegible]967;
XX
DT   09-APR-1998  (first entry)
XX
DE   Cryptic peptide of major cat allergen Fel dI.
XX
KW   Major cat allergen; Fel dI; chain 1; cryptic peptide; [illegible] asthma;
KW   atopic allergy; therapy.
XX
OS   Felis sp.
XX
PN   WO9735[illegible]-A1.
XX
PD   25-SEP-1997.
XX
PF   2[illegible]-MAR-1997;   97WO-GB00784.
XX
PR   24-APR-1996;   96GB-0008470.
PR   21-MAR-1996;   96GB-0005904.
XX
PA   (UNIV-) IMPERIAL COLLEGE SCI TECHNOLOGY & MED.
XX
PI   Kay AB,  Larche M;
XX
DR   WPI; 1997-483454/44.
XX
PT   Determining if peptide of protein is cryptic peptide - by comparing
PT   its reactivity with pre-challenged and non-pre-challenged T-cells,
PT   useful to diagnose or treat atopic condition, e.g. asthma
XX
PS   Claim 12; Page 27; 4[illegible]pp; English.
XX
CC   This sequence represents a cryptic peptide of the major cat allergen
CC   Fel dI. This sequence can be used in the method of the invention. The
CC   method of the invention is for determining if a peptide of a protein is a
CC   cryptic peptide, and comprises: (a) exposing T-cells to the peptide in a
CC   primary challenge, and measuring the reactivity of the T-cells to the
CC   peptide; (b) exposing pre-challenged T-cells, obtained by exposure to the
CC   protein or to the peptide in a secondary challenge, and measuring the
CC   reactivity of the pre-challenged T-cells to the peptide; and
CC   (c) determining the peptide to be a cryptic peptide if T-cell reactivity
CC   is observed in the secondary, but not in the primary challenge. Peptides
CC   identified as being cryptic can be used to diagnose or treat an atopic
CC   allergy, e.g. asthma. They can also be used in to screen compounds for
CC   therapeutic activity, e.g. asthma therapeutic activity.
XX
SQ   Sequence   14 AA;

  Query Match              82.[illegible]%;  Score 7[illegible];  DB 18;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 1.6e-05;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          [illegible]EYVEQV 14
Db          1 [illegible]eyveq[illegible] 14

RESULT [illegible]
AAW4[illegible]
ID   AAW4[illegible] standard; peptide; 14 AA.
XX
AC   AAW4[illegible];
XX
DT   [illegible]-APR-1998  (first entry)
XX
DE   Cryptic peptide [illegible] cat allergen [illegible]
XX
KW   Major cat allergen; Fel dI; chain 1; cr[illegible]
KW   atopic allergy; therapy.
XX
OS   Felis sp.
XX
PN   WO97351[illegible]-A1.
XX
PD   25-SEP-1997.
XX
PF   20-MAR-1997;   97WO-GB00784.
XX
PR   24-APR-[illegible]
PR   21-MAR-[illegible]
XX
PA   (UNIV-) IMPERIAL [illegible]
XX
PI   Kay AB,  Larche M;
XX
DR   WPI; 1997-[illegible]
XX
PT   Determining if peptide of protein is cr[illegible]
PT   its reactivity with pre-challenged and [illegible]
PT   useful to [illegible] treat atopic [illegible]
XX
PS   Claim 12; Page 27; 4[illegible]pp; English.
XX
CC   This sequence represents a cryptic pep[illegible]
CC   Fel dI. This sequence can be used in th[illegible]
CC   method of the invention is for determin[illegible]
CC   cryptic peptide, and comprises: (a) exp[illegible]
CC   primary challenge, and measuring the re[illegible]
CC   peptide; (b) exposing pre-challenged T[illegible]
CC   protein, to the peptide in a secondary [illegible]
CC   reactivity of the pre-challenged T-cel[illegible]
CC   (c) determining the peptide to be a cry[illegible]
CC   is observed in the secondary, but not [illegible]
CC   identified as being cryptic can be used [illegible]
CC   allergy, e.g. asthma. They can also be [illegible]
CC   therapeutic activity, e.g. asthma thera[illegible]
XX
SQ   Sequence   14 AA;

  Query Match              [illegible]%;  Score [illegible]
  Best Local Similarity   [illegible]%;  Pred. No. [illegible]
  Matches   14;  Conservative    [illegible];  Mismatches [illegible]

Qy          2 FLIGIPEFYVEQVA 1[illegible]
Db          1 fligipefyveq[illegible]

RESULT [illegible]
AAB2[illegible]
ID   AAB2896[illegible] standard; peptide; 1[illegible] AA.
XX
AC   AAB28960;
XX
DT   2[illegible]-JAN-[illegible]  (first entry)
XX
DE   TEEP [illegible]
```

XX
KW Cat; allergy; human T cell reactive feline protein; hTRFP;
KW immunotherapy.
XX
OS Felis sp.
XX
PN US6120759-A.
XX
PD 19-SEP-2000.
XX
PF 29-APR-1995; 95US-0431184.
XX
PR 02-SEP-1994; 94US-0300928.
PR 03-NOV-1989; 89US-0431565.
PR 28-FEB-1991; 91US-0662276.
PR 13-DEC-1991; 91US-0807529.
PR 25-MAR-1992; 92US-0857311.
PR 15-MAY-1992; 92US-0884718.
PR 15-JAN-1993; 93US-0006116.
XX
PA (IMMU-) IMMUNOMEDICS INC.
XX
PI Getter ML, Garman RD, Greenstein JL, Bond JF;
XX
DR WPI; 2000-601477/57.
XX
PT Detecting, preventing and treating sensitivity to cat protein allergen
PT comprises combining a biological sample with a human T cell reactive
PT feline protein and determining the extent of binding that occurs
XX
PS Example 4; Column 41; 136pp; English.
XX
CC The present invention relates to the detection of sensitivity to a cat
CC protein allergen by combining a blood sample from a subject with a
CC peptide of human T cell reactive feline protein (hTRFP). This method
CC and the hTRFP peptides are useful for diagnosing, preventing and
CC treating cat allergies by reducing or abolishing an individual's
CC allergic response to a cat allergen. DNA encoding the TRFP may be
CC used as probes to locate equivalent sequences present in other species.
CC These may further be used to study the mechanism of immunotherapy of
CC cat allergy, and to design modified derivatives, analogues or
CC functional equivalents useful in immunotherapy. The present
CC sequence was used in the invention.
XX
SQ Sequence 17 AA;

Query Match 82.0%; Score 73; DB 21; Length 17;
Best Local Similarity 100.0%; Pred. No. 2e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LFLIGIPDEYVEQV 14
||||||||||||||
Db 4 lflIqtpdeyveqv 17

RESULT 7
AAY87703
ID AAY87703 standard; Protein; 17 AA.
XX
AC AAY87703;
XX
DT 22-AUG-2000 (first entry)
XX
DE Feline human TRFP peptide Fel 2.
XX
KW T-cell reactive feline protein; TRFP; Fel d 1; cat allergen;
KW antiallergic; T cell stimulator; diagnostic; immunotherapy.
XX
OS Felis sp.
XX
PN US6048962-A.
XX
PD 11-APR-2000.
XX
PF 27-APR-1995; 95US-0430014.
XX
PR 02-SEP-1994; 94US-0300928.
PR 03-NOV-1989; 89US-0431565.
PR 28-FEB-1991; 91US-0662276.
PR 13-DEC-1991; 91US-0807529.
PR 25-MAR-1992; 92US-0857311.
PR 15-MAY-1992; 92US-0884718.
PR 15-JAN-1993; 93US-0006116.
XX
PA (IMMU-) IMMUNOGIC PHARM CORP.
XX
PI F.-M. Meyers BL, Getter ML, Morgenstern JP, Brauer AW;
PI Greenstein JL, Griffith IJ, Garman RD;
XX
DR WPI; 2000-316905/27.
XX
PT New human T cell reactive feline protein useful for reducing or
PT abolishing individual's allergic response to cat allergen comprising
PT two different covalently linked peptide chains
XX
PS Example 4; Column 103-104; 106pp; English.
XX
CC This invention describes a novel naturally occurring cat protein allergen
CC (I), human T cell reactive feline protein (TRFP), comprising two
CC different covalently linked peptide chains with a molecular weight of 20
CC kD, 40 kD or 130 kD under non-reducing conditions and 5 kD or 10-18 kD
CC under reducing conditions. The products of the invention have
CC antiallergic activity and act as human T cell stimulators. TRFP is useful
CC for reducing or preventing the adverse effects of cat allergens on cat
CC allergic individuals and in ex vivo diagnostic tests to determine which
CC peptides give sensitivity so as to selectively use them to desensitize
CC a cat sensitive individual. Purified TRFP is also useful for studying
CC the mechanism of immunotherapy of cat allergy and to design modified
CC derivatives, analogs or functional equivalents that are more useful in
CC immunotherapy against cat allergy. DNA sequences encoding TRFP are
CC useful as probes to locate equivalent sequences present in other species
CC (goats, sheep, dogs, rabbits or horses) that may be useful in diagnostics
CC and/or therapeutics. Fully defined and characterized TRFP provides
CC complete and a very simple desensitization therapy. This sequence
CC represents a human T cell reactive feline protein (also known as Fel d 1)
CC derived peptide Fel 2 which is described in the method of the invention.
XX
SQ Sequence 17 AA;

Query Match 82.0%; Score 73; DB 21; Length 17;
Best Local Similarity 100.0%; Pred. No. 2e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LFLIGIPDEYVEQV 14
||||||||||||||
Db 4 lflIqtpdeyveqv 17

RESULT 8
AAY90115
ID AAY90115 standard; Peptide; 17 AA.
XX
AC AAY90115;
XX
DT 13-JUL-2000 (first entry)
XX
DE Cat TRFP chain 1 derived peptide, peptide Fel 2.
XX
KW Cat; TRFP; human T-cell reactive feline protein; cat protein allergen;
KW house dust, Fel d 1, cat allergy, Felis domesticus sensitivity; therapy;
KW diagnosis; goat; sheep; horse; rabbit; dog.
XX
OS Felis domesticus.
XX

```
PN   US6025162-A.
XX
PD   15-FEB-2000.
XX
PF   28-APR-1995;   95US-0430944.
XX
PR   02-SEP-1994;   94US-0300928.
PR   03-NOV-1989;   89US-0431565.
PR   28-FEB-1991;   91US-0662276.
PR   13-DEC-1991;   91US-0807[illegible].
PR   25-MAR-1992;   92US-085731[illegible].
PR   15-MAY-1992;   92US-0884718.
PR   15-JAN-1993;   93US-0006116.
XX
PA   (IMMU-) IMMULOGIC PHARM CORP.
XX
PI   Morgenstern JP,  Griffith IJ,  Rogers BL;
XX
DR   WPI; 2[illegible]-[illegible]12/1[illegible].
XX
PT   New human T cell reactive feline protein, useful for desensitising cat
PT   allergic individuals to cat allergens
XX
PS   Example 4; Column 45; 108pp; English.
XX
CC   This sequence is a peptide derived from the human T cell reactive feline
CC   protein (TRFP) of the invention. The protein is a cat protein allergen,
CC   and was isolated from a vacuum bag extract obtained by affinity
CC   purification of house dust collected from several homes with cats. TRFP
CC   is composed of two covalently linked peptide chains, and is also referred
CC   to as Fel d I. TRFP and its peptides are useful for reducing or
CC   preventing the adverse effects that exposure to cat allergens normally
CC   has on cat allergic individuals (i.e. to desensitise individuals to cat
CC   allergens or block the effect of the allergens). TRFP is also used in
CC   methods of diagnosing sensitivity to Felis domesticus in an individual.
CC   DNA sequences encoding TRFP can be used as probes to isolate equivalent
CC   sequences present in other species, e.g. goat, sheep, horse, rabbit and
CC   deer, that may be useful in diagnostic and/or therapeutic applications.
XX
SQ   Sequence  17 AA;

  Query Match             82.0%;  Score 73;  DB 21;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 2e-05;
  Matches   14;  Conservative   [illegible];  Mismatches   [illegible];  Indels   [illegible];  Gaps   [illegible];

Qy        1 LFLLTGTPDEYVEQV 14
            [illegible]
Db        4 [illegible]tpdeyveqv 17


RESULT [illegible]
AAY[illegible]
ID   AAY[illegible] standard; Protein; 17 AA.
XX
AC   AAY[illegible]
XX
DT   22-MAY-2000  (first entry)
XX
DE   Human TRFP derived peptide Fel 2.
XX
KW   T cell reactive feline protein; TRFP; T cell epitope; T cell receptor;
KW   down regulation; immune response; allergen; immunoglobulin E;
KW   sensitivity; cat protein allergen; human.
XX
OS   Homo sapiens.
XX
PN   US6019972-A.
XX
PD   01-FEB-2000.
XX
PF   02-SEP-1994;   94US-0300928.
XX

PR   03-NOV-1989;   [illegible]431565.
PR   28-FEB-1991;   [illegible]662276.
PR   13-DEC-1991;   [illegible]7[illegible]2[illegible].
PR   25-MAR-1992;   [illegible]857311.
PR   15-MAY-1992;   92US-0884718.
PR   15-JAN-1993;   93US-0006116.
XX
PA   (IMMU-) IMMU[illegible] PHARM CORP.
XX
PI   Garman RD,  [illegible],  Ku  M,  [illegible]  [illegible] M
XX
DR   WPI; 200[illegible] 14[illegible].
XX
PT   Peptides [illegible] human T cell reactive feline [illegible]
PT   sensitivity [illegible] cat protein allergens [illegible]
PT   epitope recognized by a T cell receptor [illegible]
PT   reactive feline [illegible]
XX
PS   Example 3 [illegible]
XX
CC   This invention describes a novel peptide [illegible]
CC   feline protein (TRFP) having at least [illegible]
CC   by a T cell receptor [illegible]
CC   protein. The peptide consisting [illegible]
CC   an amino acid sequence derived from [illegible]
CC   96, 97, [illegible] residues, given in [illegible]
CC   down regulate the immune response to the [illegible]
CC   reduced [illegible]
CC   peptide [illegible] composition [illegible]
CC   protein allergen [illegible]. This seq[illegible]
CC   derived peptide [illegible] the method [illegible]
XX
SQ   Sequence [illegible] AA;

  Query Match             [illegible]%;  Score [illegible];
  Best Local Similarity   [illegible]%;  Pred. No. [illegible]
  Matches   14;  Conservative   [illegible];  Mismatches   [illegible]

Qy        1 LFL[illegible]EYV[illegible]
            [illegible]
Db        4 [illegible]tpdey[illegible]


RESULT [illegible]
AAW4[illegible]
ID   AAW4[illegible] standard; peptide; 14 AA.
XX
AC   AAW4[illegible]
XX
DT   [illegible]-APR-[illegible]  (first entry)
XX
DE   Cryptic peptide [illegible] cat allergen [illegible]
XX
KW   Major cat allergen [illegible]
KW   atopic allergy [illegible]
XX
OS   Felis sp.
XX
PN   WO[illegible]-A.
XX
PD   25-SEP-[illegible].
XX
PF   20-MAR-[illegible]   [illegible]W[illegible]
XX
PR   2[illegible]-APR-[illegible]   [illegible]
PR   21-MAR-[illegible]   [illegible]
XX
PA   (UNI[illegible]) IMPERIAL [illegible] SCI TECHN[illegible]
XX
PI   Kay AB,  [illegible] M
XX
DR   WPI; 199[illegible]-4[illegible]/[illegible].
```

XX
PT Determining if peptide of protein is cryptic peptide - by comparing
PT its reactivity with pre-challenged and non-pre-challenged T cells,
PT useful to diagnose or treat atopic condition, e.g. asthma
XX
PS Claim 12; Page 27; 49pp; English.
XX
CC This sequence represents a cryptic peptide of the major cat allergen
CC Fel dI. This sequence can be used in the method of the invention. The
CC method of the invention is for determining if a peptide of a protein is a
CC cryptic peptide, and comprises: (a) exposing T-cells to the peptide in a
CC primary challenge, and measuring the reactivity of the T-cells to the
CC peptide; (b) exposing pre-challenged T-cells, obtained by exposure to the
CC protein, to the peptide in a secondary challenge, and measuring the
CC reactivity of the pre-challenged T-cells to the peptide; and
CC (c) determining the peptide to be a cryptic peptide if T-cell reactivity
CC is observed in the secondary, but not in the primary challenge. Peptides
CC identified as being cryptic can be used to diagnose or treat an atopic
CC allergy, e.g. asthma. They can also be used in to screen compounds for
CC therapeutic activity, e.g. asthma therapeutic activity.
XX
SQ Sequence 14 AA;

Query Match 80.9%; Score 72; DB 18; Length 14;
Best Local Similarity 100.0%; Pred. No. 2.4e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 LTGTPDEYVEQVAQ 16
||||||||||||||
Db 1 ltgtpdeyveqvaq 14

RESULT 11
AAW40971
ID AAW40971 standard; peptide; 14 AA.
XX
AC AAW40971;
XX
DT 09-APR-1998 (first entry)
XX
DE Cryptic peptide of major cat allergen Fel dI.
XX
KW Major cat allergen; Fel dI; chain 1; cryptic peptide; T-cell; asthma;
KW atopic allergy; therapy.
XX
OS Felis sp.
XX
PN WO9735193-A1.
XX
PD 25-SEP-1997.
XX
PF 20-MAR-1997; 97WO-GB00783.
XX
PR 24-APR-1996; 96GB-0008430.
PR 21-MAR-1996; 96GB-0005904.
XX
PA (UNIO) IMPERIAL COLLEGE SCI TECHNOLOGY & MED.
XX
PI Kay AB, Larche M;
XX
DR WPI; 1997-480354/44.
XX
PT Determining if peptide of protein is cryptic peptide - by comparing
PT its reactivity with pre-challenged and non-pre-challenged T cells,
PT useful to diagnose or treat atopic condition, e.g. asthma
XX
PS Claim 12; Page 28; 49pp; English.
XX
CC This sequence represents a cryptic peptide of the major cat allergen
CC Fel dI. This sequence can be used in the method of the invention. The
CC method of the invention is for determining if a peptide of a protein is a
CC cryptic peptide, and comprises: (a) exposing T-cells to the peptide in a
CC primary challenge, and measuring the reactivity of the T-cells to the
CC peptide; (b) exposing pre-challenged T-cells, obtained by exposure to the
CC protein, to the peptide in a secondary challenge, and measuring the
CC reactivity of the pre-challenged T-cells to the peptide; and
CC (c) determining the peptide to be a cryptic peptide if T-cell reactivity
CC is observed in the secondary, but not in the primary challenge. Peptides
CC identified as being cryptic can be used to diagnose or treat an atopic
CC allergy, e.g. asthma. They can also be used in to screen compounds for
CC therapeutic activity, e.g. asthma therapeutic activity.
XX
SQ Sequence 14 AA;

Query Match 78.7%; Score 70; DB 18; Length 14;
Best Local Similarity 100.0%; Pred. No. 5.2e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 5 GTPDEYVEQVAQY 17
||||||||||||||
Db 1 qtpdeyveqvaqy 13

RESULT 12
AAW40936
ID AAW40936 standard; peptide; 16 AA.
XX
AC AAW40936;
XX
DT 09-APR-1998 (first entry)
XX
DE Cryptic peptide 3 of chain 1 of major cat allergen Fel dI.
XX
KW Major cat allergen; Fel dI; chain 1; cryptic peptide; T-cell; asthma;
KW atopic allergy; therapy.
XX
OS Felis sp.
XX
PN WO9735193-A1.
XX
PD 25-SEP-1997.
XX
PF 20-MAR-1997; 97WO-GB00783.
XX
PR 24-APR-1996; 96GB-0008430.
PR 21-MAR-1996; 96GB-0005904.
XX
PA (UNIO) IMPERIAL COLLEGE SCI TECHNOLOGY & MED.
XX
PI Kay AB, Larche M;
XX
DR WPI; 1997-480354/44.
XX
PT Determining if peptide of protein is cryptic peptide - by comparing
PT its reactivity with pre-challenged and non-pre-challenged T cells,
PT useful to diagnose or treat atopic condition, e.g. asthma
XX
PS Claim 12; Fig 1; 49pp; English.
XX
CC This sequence represents a cryptic peptide of the chain 1 sequence of the
CC major cat allergen Fel dI. This sequence can be used in the method of the
CC invention. The method of the invention is for determining if a peptide of
CC a protein is a cryptic peptide, and comprises: (a) exposing T-cells to
CC the peptide in a primary challenge, and measuring the reactivity of the
CC T-cells to the peptide; (b) exposing pre-challenged T-cells, obtained by
CC exposure to the protein, to the peptide in a secondary challenge, and
CC measuring the reactivity of the pre-challenged T-cells to the peptide;
CC and (c) determining the peptide to be a cryptic peptide if T-cell
CC reactivity is observed in the secondary, but not in the primary
CC challenge. Peptides identified as being cryptic can be used to diagnose
CC or treat an atopic allergy, e.g. asthma. They can also be used in to
CC screen compounds for therapeutic activity, e.g. asthma therapeutic
CC activity.
XX

```
SQ   Sequence   1[illegible] AA;

  Query Match            [illegible];  Score [illegible];  DB [illegible];  Length [illegible];
  Best Local Similarity  [illegible];  Pred. No. [illegible];
  Matches  [illegible];  Conservative  [illegible];  Mismatches  [illegible];  Indels  [illegible];  Gaps  [illegible];

Qy      5 [illegible]DEYVEQVAQY 17
          [illegible]
Db      [illegible] 1[illegible]

RESULT 13
AAW4[illegible]
ID   AAW4[illegible] standard; peptide; 14 AA.
XX
AC   AAW4[illegible];
XX
DT   [illegible] APR [illegible] (first entry)
XX
DE   Cryptic peptide [illegible] allergen Fel d1.
XX
KW   [illegible] allergen; Fel d1 chain [illegible]; cryptic peptide; [illegible] asthma;
KW   atopic allergy; therapy.
XX
OS   Felis sp.
XX
PN   W[illegible] A1.
XX
PD   2[illegible] SEP [illegible].
XX
PF   2[illegible]-MAR-[illegible]7;   97WO-GB007[illegible].
XX
PR   24-APR-[illegible]996;   96GB-0008430.
PR   2[illegible]-MAR-[illegible]996;   96GB-[illegible]5[illegible]4.
XX
PA   (UNI[illegible]) IMPERIAL COLLEGE SCI TECHNOLOGY & MED.
XX
PI   Kay AB, Larche M;
XX
DR   WPI; [illegible] 48[illegible]54/44.
XX
PT   Determining if peptide of protein is cryptic peptide [illegible] comparing
PT   its reactivity with pre-challenged and non pre-challenged [illegible] cells,
PT   useful to diagnose or treat atopic condition, e.g. asthma
XX
PS   Claim 12; Page 2[illegible]; 4[illegible]pp; English.
XX
CC   This sequence represents a cryptic peptide of the major cat allergen
CC   Fel d1. This sequence can be used in the method of the invention. The
CC   method of the invention is for determining if a peptide of a protein is a
CC   cryptic peptide, and comprises: (a) exposing T cells to the peptide in a
CC   primary challenge, and measuring the reactivity of the T cells to the
CC   peptide; (b) exposing pre-challenged T-cells, obtained by exposure to the
CC   protein, to the peptide in a secondary challenge, and measuring the
CC   reactivity of the pre-challenged T-cells to the peptide; and
CC   (c) determining the peptide to be a cryptic peptide if T cell reactivity
CC   is observed in the secondary, but not in the primary challenge. Peptides
CC   identified as being cryptic can be used to diagnose or treat an atopic
CC   allergy, e.g. asthma. They can also be used in to screen compounds for
CC   therapeutic activity, e.g. asthma therapeutic activity.
XX
SQ   Sequence   14 AA;

  Query Match            [illegible];  Score [illegible];  DB [illegible];  Length [illegible];
  Best Local Similarity  [illegible];  Pred. No. [illegible];
  Matches  [illegible];  Conservative  [illegible];  Mismatches  [illegible];  Indels  [illegible];  Gaps  [illegible];

Qy      [illegible] LEL[illegible]IELPYVEQ 14
          [illegible]
Db      [illegible] 14

RESULT 14
AAW4[illegible]
ID   AAW4[illegible] standard; peptide; 14 AA.
XX
AC   AAW4[illegible];
XX
DT   09 APR 1[illegible] (first entry)
XX
DE   Cryptic peptide [illegible] cat allergen [illegible]
XX
KW   [illegible]
KW   at[illegible] allergy; therapy.
XX
OS   Felis sp.
XX
PN   W[illegible] A[illegible].
XX
PD   2[illegible] SEP [illegible].
XX
PF   2[illegible] MAR [illegible]
XX
PR   24 APR [illegible]
PR   21 MAR [illegible] [illegible]4.
XX
PA   (UNI[illegible]) IMPERIAL [illegible] TECHN[illegible]
XX
PI   Kay AB, [illegible]
XX
DR   WPI; [illegible]
XX
PT   Determining if peptide of protein is cr[illegible]
PT   its reactivity with pre-challenged and [illegible]
PT   useful to diagnose or treat atopic cond[illegible] asthma
XX
PS   Claim 12; Page 2[illegible]; 4[illegible]pp; English.
XX
CC   This sequence represents a cryptic pept[illegible]
CC   Fel d1. This sequence can be used in the [illegible]
CC   method of the invention is for determin[illegible]
CC   cryptic peptide, and comprises: (a) exp[illegible]
CC   primary challenge, and measuring the re[illegible]
CC   peptide; (b) exposing pre-challenged T[illegible]
CC   protein, to the peptide in a secondary [illegible]
CC   reactivity of the pre-challenged T-cel[illegible]
CC   (c) determining the peptide to be a cry[illegible]
CC   is observed in the secondary, but not i[illegible]
CC   identified as being cryptic can be used [illegible]
CC   allergy, e.g. asthma. They can also be [illegible]
CC   therapeutic activity, e.g. asthma therap[illegible]
XX
SQ   Sequence   14 AA;

  Query Match            [illegible];  Score [illegible];
  Best Local Similarity  [illegible];  Pred. N[illegible]
  Matches  [illegible];  Conservative  [illegible];  Mismatches [illegible]

Qy      1 LELPIIEIIYVE[illegible]
          [illegible]
Db      [illegible] 14

RESULT 15
AAW4[illegible]
ID   AAW4[illegible] standard; peptide; 14 AA.
XX
AC   AAW4[illegible];
XX
DT   09 APR 1[illegible] (first entry)
XX
DE   Cryptic peptide [illegible] cat allergen [illegible]
XX
```

KW Major cat allergen, Fel dI, chain 1, cryptic peptide; T-cell; asthma;
KW atopic allergy; therapy.
XX
OS Felis sp.
XX
PN WO9735193-A1.
XX
PD 25-SEP-1997.
XX
PF 20-MAR-1997; 97WO-GB00783.
XX
PR 24-APR-1996; 96GB-0008430.
PR 21-MAR-1996; 96GB-0005904.
XX
PA (UNIO) IMPERIAL COLLEGE SCI TECHNOLOGY & MED.
XX
PI Kay AB, Larche M;
XX
DR WPI; 1997-480354/44.
XX
PI Determining if peptide of protein is cryptic peptide - by comparing
PI its reactivity with pre-challenged and non-pre-challenged T cells,
PT useful to diagnose or treat atopic condition, e.g. asthma
XX
PS Claim 12; Page 28; 49pp; English.
XX
CC This sequence represents a cryptic peptide of the major cat allergen
CC Fel dI. This sequence can be used in the method of the invention. The
CC method of the invention is for determining if a peptide of a protein is a
CC cryptic peptide, and comprises: (a) exposing T cells to the peptide in a
CC primary challenge, and measuring the reactivity of the T-cells to the
CC peptide; (b) exposing pre challenged T cells, obtained by exposure to the
CC protein, to the peptide in a secondary challenge, and measuring the
CC reactivity of the pre challenged T cells to the peptide; and
CC (c) determining the peptide to be a cryptic peptide if T cell reactivity
CC is observed in the secondary, but not in the primary challenge. Peptides
CC identified as being cryptic can be used to diagnose or treat an atopic
CC allergy, e.g. asthma. They can also be used in to screen compounds for
CC therapeutic activity, e.g. asthma therapeutic activity.
XX
SQ Sequence 14 AA;

Query Match 71.9%; Score 64; DB 18; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.00052;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 6 TPDEYVEQVAQY 17
||||||||||||
Db 1 tpdeyveqvaqy 12

Search completed: July 17, 2002, 11:05:06
Job time: 401 sec